

Development of Machining fixtures - A practical Approach

**Date: 15 to 19 November, 2021** 

Time: 0940 Hrs to 1300 Hrs (Online Mode)

### INTRODUCTION

The course is designed with the intent of bringing greater insight into fixtures and their application across all manufacturing processes. Comprehensive learning on fixtures for machining, welding, inspection, and assembly is the main focus of the programme. Machining fixtures are most complex in nature due to customers' stringent requirements from the part accuracy (both dimensional and geometrical) and productivity point of view. Basics of fixture design, if not implemented correctly result in poor productivity & quality problems. Set-up time and cycle time reduction, increased accuracy on components, deskilling the job setting operation are the obvious advantages of a good fixture. Competence in the right fixture differentiates excellent organizations.

Complete fundamentals and the process of fixture design are described from concept to final design in the programme. Pre-design activities like design input, conceptualization, process planning, accuracy consideration, cycle time estimation, POKAYOKE, 3D modeling of parts and assembly are demonstrated systematically with case studies. It will be highly interactive and covers an entire 360° view of all fixtures.

Keeping this in view, IMTMA is organizing an online training on the Development of Machining fixtures - A practical Approach.

Special Offer: Participants will be provided **FREE ACCESS** to the **IMTMA E'learning** course on "**GD&T**" towards continual learning and upskilling. Access will be valid from 15 Nov to 24 Nov 2021.

### **FOCUS AREAS**

- Fundamentals of fixtures
- Fixtures for various manufacturing processes
- Design considerations for machining fixture
- Systematic study on component drawing for part accuracy, cycle time, location, clamping for machining process
- Design exercise for simple fixtures case study
- Introduction to hydraulic and pneumatic fixtures with case study
- A demo project on fixture for an auto component case study
- Basics of Assembly, Welding and Inspection fixtures
- Case studies on all types of fixtures will be reviewed for better understanding

### **KEY TAKE AWAYS**

- Comprehensive knowledge fixtures
- Systematic approach for designing a simple to complex fixture
- What to be considered from Machine tool to design a machining fixture
- An experience in fixture design
- Knowledge on pneumatic and hydraulics
- $\bullet\,$  Comprehensive learning on assembly, welding and inspection fixtures

# FEE PER PARTICIPANT (PER LOGIN)

Rs. 10000/-

+18% GST

IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others USD 400/Overseas Participants

Group Concession: 10% for 3 to 5 and 15% for 6 and more delegates being nominated from the same company

## **FACULTY**

This programme will be conducted by -

**S K Gupta** has worked as an Assistant General Manager, Machine Design & Business Development, Tata Motors - Machine Tools division, Pune. He has over 3 decades of professional experience in the field of Machine Tools and Fixturing practices.

**BL Patil**, Senior Executive Officer at IMTMA, is a Mechanical engineering graduate, has a professional experience of over 28 years in the manufacturing domain as a designer of machines and fixtures. He worked in Kinetic and Avasarala Automation, Bangalore.

## **For Registration Contact**

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## **Contact Address**

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